Abstract

A light wave radar apparatus includes a frequency deviation detecting unit 12 for detecting a frequency deviation f_{chirp} of a light signal, and a weighted average processing unit 13 for determining a systematic error ΔV_{offset} from the frequency deviation f_{chirp} detected by the frequency deviation detecting unit 12, and subtracts the systematic error ΔV_{offset} from a wind velocity V_W calculated by a Doppler signal processing unit 11. As a result, the light wave radar apparatus can carry out a measurement of the wind velocity V_W with a high degree of precision.